TENURE AND SATISFACTION AS INDICATORS OF ATTACHMENT: A NOTE

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ABSTRACT

The role of community attachments in decision-making models of migration is evaluated. Findings of a block model analysis (with multiple partials) are reported with data from a longitudinal study. Findings indicate that attachments to community only partially explain willingness to move.

INTRODUCTION

This paper explores the influence of social and economic intentions to move. Intention to move is considered in studies by Lansing and Mueller (1967), Speare (1974), DeJong and Sell (1973), Bach and Smith (1977), Blackwood and Carpenter (1978), Heaton, et al. (1979), and Swanson et al. (1979a; b), each of which infer that the desire to move increases the likelihood of migration. This research focuses on the characteristics of the pool of potential migrants in Pennsylvania and not on actual migrants. Our measure, willingness to move towards economic opportunities, is drawn from both Factor Mobility and Human Ecological theories. These closely related theories begin with the premise that labor reallocates itself in response to market needs. It is assumed that everyone in or desiring to be in the labor force is willing to move towards opportunities that maximize his gains. It is further assumed that neither age nor community ties will reduce this intention. Clearly the definition of what is an opportunity is critical to such a measure and varies among individuals. Our measure is based on the respondents definition of opportunity.

Demographic studies have identified social and economic characteristics which influence the migration decision making process. Such characteristics as age (life cycle stage), labor force participation (employment status) and socioeconomic status (education, occupation, income) have been found to influence directly a desire to move and only indirectly actual mobility (cf. Speare, 1974; Bach and Smith, 1977).

In an earlier study (Swanson, et al. 1979a), the relationships between both economic incentives and social constraints and an individual's willingness to move was examined. People either participating in or desiring to enter the labor force demonstrate continued willingness to move towards employment opportunities. For these people, age has little influence upon willingness to move until near retirement (62 years of age and older). A person near or past retirement age who continued to participate in the labor force was found to maintain a higher willingness to move towards new employment opportunities than his counterparts. This finding was particularly instructive in defining the fluidity of the Pennsylvania nonmetropolitan labor force.

On the other hand, the community factors which were thought to dissuade an individual's willingness to move were either not significant or were in the opposite direction than hypothesized. It had been common to assume that as an individual's pecuniary or subjective investments in a locality increased, as measured through increased satisfaction or tenure in a community, a concomitant decrease in potential movement from the locality would occur. The finding that neither indicator (community satisfaction or community tenure) was particularly meaningful in influencing the behavior intention measure differed from the findings of Bach and Smith (1977). In the absence of conclusive evidence a more in-depth examination of community attachment factors and the role they play on migration decision making is desirable.

Two approaches to the study of community guide the articulation of hypotheses about attachment factors. The most often used assumes that conditions within a community influence migration and by inference migration intentions (Goldscheider, 1971; Shaw, 1975; Ritchey, 1976).

Within the migration literature there is an active tradition of individual decision making models akin to economic household decision making models which investigate subjective influences on individual behavior. Sell (1977:25) has proposed that "what delineates social psychological views of migration is the contention that needs, values, aspirations, and general perceptual rather than objective considerations play a crucial role in understanding the decision to migrate." Two community concepts which have appeared in micro-migration models are community satisfaction and community integration. These are assumed to tap the subjective and pecuniary investments a family might have in a locality which may influence the decision to move.

The use of community (or residential) satisfaction within these models is traced to Wolpert (1965). His notion of the "stress-threshold" effect attempts to incorporate behavioral param-

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The data upon which this publication is based were collected pursuant to Contract No. NIH-NICHD-72-2743 with the National Institutes of Child Health and Human Development. This research was partially funded by the Pennsylvania State University Program of the 1972 Rural Development Act. Published with the approval of the Director of the New Hampshire Agricultural Experiment Station as Scientific Contribution No. 1083. We gratefully acknowledge the assistance of Ken Wilkinson and Dan Moore and many other reviewers. An earlier version of the paper was presented at the 1980 Rural Sociological Society meetings.

eters of migration. According to Wolpert (1965: 160):

> Any theory of economic determinism in migration is inclined to be incomplete...(the) understanding and prediction of migration streams require determining of the constants in migration behavior and distinguishing these from the variables with respect to population composition and place characteristics which evolve differentially over time.

Speare (1974) expands upon the work of Wolpert by substituting residential dissatisfaction for the latter's notion of stress, thereby deemphasizing any connotation of mental tension. In Speare's model, one's level of dissatisfaction will affect one's decision to move. Positive scores on satisfaction are observed to have no significant impact either way, therefore, when the net effect of the stimuli (both negative and positive) leads to a sufficiently negative evaluation--i.e., dissatisfaction--the individual will act on opting for alternatives. In this model, a move is ultimately a function of an evaluation of current levels of dissatisfaction. In terms of our dependent variable, the dissatisfied respondents may lower their horizons as to what is considered an opportunity, possibly to the point of accepting "horizontal" movement within their identified opportunity structure.

Bach and Smith (1977) elaborate on Speare's model. They define migration as change of residence across county borders. In addition to the use of a satisfaction measure, Bach and Smith also include length of tenure of a household in a given locality as an indicator of community attachment. Tenure is treated as a key dimension of community integration. It is assumed that as a family's tenure in a community increases, so will the number of its ties and intensity of the concomitant interactions with other residents of that community.

The second approach to community variables is generally traced to the literature of community studies. The work of Speare, et al. (1975) and Bach and Smith (1977) parallels the work of Suttles (1972), Kasarda and Janowitz (1974), and Berry and Kasarda (1977). Speare's emphasis on community satisfaction and community integration supports the basic contention of the concept of community of limited liability, cogently discussed by Berry and Kasarda (1977). All recognize the importance of the communal bond as a key element in an individual's life space. With an increasingly mobile society the degree of community attachment and participation in the local community is not as unequivocal as once assumed. According to Berry and Kasarda (1977:57):

> "...people's involvement in their local community is such that when it fails to serve their immediate needs or aspirations they will display a lack of participation and be prepared to leave the community for alternative opportunities."

Because economic incentives continue to play a role in migration patterns, especially in light of current inflation rates and the deepening recessionary atmosphere, concepts drawn from labor mobility theory make up the first "block" of factors to be examined. Factor mobility theory tells us that people will move towards new jobs if given the opportunity. Constraints on this move will be felt through stage of life cycle and socioeconomic status.

The usefulness of community attachments is assessed by incorporating these factors as a second "block." Migration decision making models, by inference, assume that strong community bonds will dissuade an individual's willingness to move, while weak bonds would allow consideration of such a move. The limited liability theory of community questions the strength of such bonds, whether weak or strong, in influencing migration or an individual's willingness to move. Because we are not interested in predicting actual migratory behaviour, our dependent variable (willingness to move toward economic opportunities) allows us to assess much of the migration literature which implicitly assumes that subjective factors are the most important influences on migratory intentions.

DATA AND METHODS

Data were drawn from a longitudinal study conducted in Pennsylvania during 1974-75 by the Population Issues Research Office (Swanson, et al., 1979a; Zelinski, et al., 1974; DeJong, 1977). Because many of Pennsylvania's demographic characteristics - with the major exception of race - approximate those of the nation, Pennsylvania is often used to generalize to the country as a whole (cf. Zelinsky, et al., 1974). This survey has previously been used to generalize to the country by Zelinsky (1978) and DeJong (1977). The intent of the original study was to explore the relationship between residential preference, migration behavior, and population distribution patterns in Pennsylvania. The survey was a multistaged area probability sample down to the block level, where quota sampling was used, with quotas based on sex and employment status (see DeJong and Bush, 1974).[1] The sampling procedures resulted in 1,099 cases.

The framework outlined in the above discussion of a conjoint model for predicting willingness to move towards economic incentives pointed to two sets of factors for use in this model. The first set of variables include the sociodemographic characteristics of labor force non-participation (work status) and socioeconomic status.

Labor force non-participation (work status) was measured directly by asking the employment status of the head of the household. Labor force non-participation was used as a dummy variable: (0) those who were employed or temporarily out of the labor force (students, unemployed), but expecting to join the labor force, and (1) those

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[1] Our final sample included only 1,096 cases bebecause of missing data. Preliminary research revealed that only minor differences would occur when the sample was restricted to either metropolitan or nonmetropolitan migrants.

who indicated that they were retired.[2]

Socioeconomic status was measured by a composite index ($\alpha = .68$) created from the log transformation and summation of each of three measures: income, education and occupation. Such a transformation allows this measure to conform to the specification of the ordinary least squares method, while at the same time incorporating traditional indicators of work force characteristics.[3]

Our block of community attachment factors, community integration and satisfaction, were also entered into all analyses conjointly. Tenure, measured in length of residence (number of years) in the community,[4] was seen as a measure of community integration.

Our index of community satisfaction was created from a series of eight Likert-type questions which sought information about the respondent's satisfaction with his community. Scores ranged from a high of 36 to a low of 8. The index's reliability coefficient ($\alpha = .67$) is within the accepted range. Our choice of items was guided by Speare's selection which included aspects of housing, neighborhood, and/or location items--all part of the respondent's life space.

Willingness to move, our dependent variable, was based on an index of five questions coded in a Likert-type manner. These questions were geared to assess the respondent's propensity for moving toward new economic opportunities.[5] The range for this index was from a low of 5 (low willingness to move toward economic opportunities) to a maximum of 16 (high willingness to move toward economic opportunities). The alpha reliability coefficient was .68.

This research uses a multiple-partial strategy which focuses on the relationships between blocks of independent variables and the dependent variable. Since we are not concerned directly over the relationships among the within-block indicators, we allow them to operate simultaneously and thus attribute the resultant multiple correlation to the block as a whole. Whenever the model implies a relationship between two blocks controlling for a third, we allow all variables in the control blocks to operate before examining the relationship between the residuals (Sullivan, 1974). In the present research model, interest focused on the effects of coupling community attachment factors and the more structural sociodemographic factors into a conjoint migration decision making model. By utilizing the block model approach, it was possible to assess whether or not such inclusions contribute unique explanatory information. The general model appears in Figure 1. The concern for this model was with testing the following predictions: $r_{ac.b} \neq 0$; $r_{bc.a} \neq 0$, where a is defined as the sociodemographic block, b is defined as the community attachment block, and c is defined as the dependent variable willingness to move.

FINDINGS

Table 1 contains the zero order correlations for both age groups (<63; 63+) with the older age group below the diagonal and the younger above.[6] For both age groups, labor force non-participation exhibits the strongest association with the dependent variable. Community integration (tenure) and labor force non- participation were correlated negatively with willingness to move for both age groups. Socioeconomic status and community satisfaction were both positively correlated with willingness to move.

To assess the degree to which community attachment variables contribute uniquely to an integrated migration decision making model, a multiple-partial block recursive design was utilized. The results of this technique are shown in Table 2. A series of regression analyses were performed for each of the two age categories. Each series consisted of three analytical equations: one fully specified model and two restricted models, one for the sociodemographic factors and one for the attachment factors.

In the full model of the younger age group (Y1) labor force non-participation, community integration and community satisfaction were negatively and significantly related to willingness to move. An individual's socioeconomic status was not related to the dependent variable.

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2 Our earlier work (Swanson, et al., 1979a; b) demonstrated that age is associated with willingness to move in a discontinuous manner. This relationship is attributed to the life cycle change accompanying retirement. Consistent with the earlier research, we partitioned the data set into two age groups (<63; ≥63). Additional comparative analyses (data not shown) with both the traditional employed, not employed dichotomy and the nonretired, retired dichotomy revealed that the latter was a better and more useful measure for our purposes.

3 SES was also examined in terms of its components (income, occupation, and education). None of the components led to results significantly different from those generated by our more parsimonious index.

4 This tenure measure was used to conform to previous usage. It should be noted, however, that two other tenure indicators (number of years in current house, and number of years in current house plus number of years in current community divided by two) were examined but failed to yield statistically significant differences.

5 Examples of the questions asked included, "If getting ahead meant that you would see less of your friends, would you be willing to do that?" and "How do you feel about the risk involved in changing residence?" A detailed reference for each variable and composite measure is available upon request.

6 It will be recalled that our earlier research indicated a significant change in slope for the two age groups <63 and 63 and over. Because of the interactive nature of this relationship, we have chosen to introduce this control in the current analysis. See Swanson, et al., (1979a; b) for further clarification.

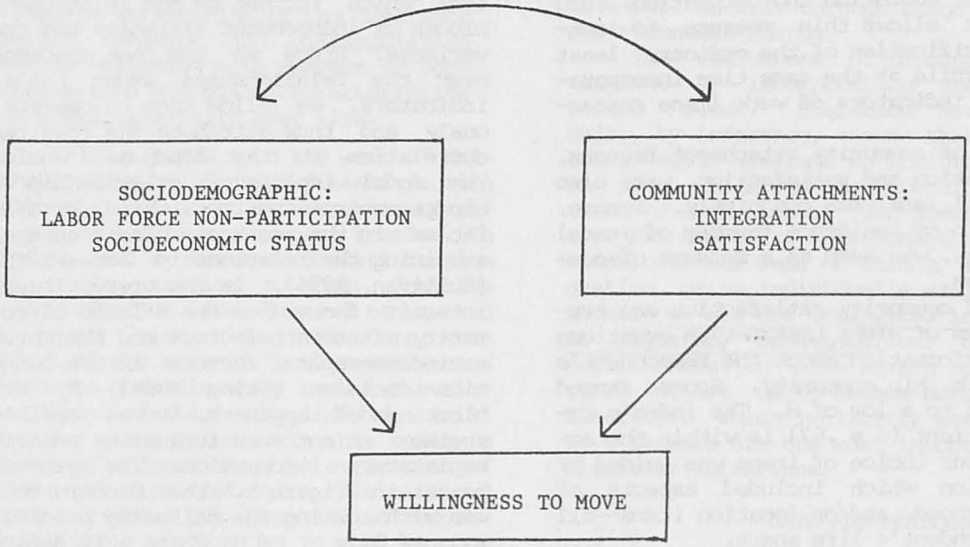

Figure 1: Sequential Block Model of the Integrated Migration Decision-Making Model

Table 1. Zero order correlations (62 and younger above diagonal; 63 and older below diagonal), n = 1,096

	Labor Force Non-Participation	Socio-Economic Status	Community Integration	Community Satisfaction	Willingness to Move
Labor Force Non-Participation		-.07	.17	.06	-.26
Socio-Economic Status	.32		-.07	.24	.07
Community Integration	.03	-.18		.14	-.21
Community Satisfaction	.05	.16	.02		.06
Willingness to Move	-.39	.17	-.19	.06	

Table 2. Results of block model (multiple partial) regression for the integrated migration decision making model.

Model[a]	Constant	b	B	Standard Error	F	R^2	Multiple Partial For Each Block
Y_1 ∫ SD: C	9.11					11	
Labor Force Non-Participation		-2.07[b]	-.24	.29	51.73		.25
Socioeconomic Status		.07	.02	.11	.46		
Community Integration		- .02[b]	-.19	.00	32.44		.21
Community Satisfaction		- .04[b]	-.09	.02	7.76		
Y_1 ∫ SD	9.38					7	
Labor Force Non-Participation		-2.29[b]	-.26	.29	62.53		
Socioeconomic Status		.18	.06	.10	3.08		
Y_1 ∫ C	9.35					6	
Community Integration		- .03[b]	-.23	.00	47.37		
Community Satisfaction		- .04[b]	-.09	.02	7.57		
Y_2 ∫ SD; C	6.14					26	
Labor Force Non-Participation		-2.82[b]	-.48	.36	62.22		.47
Socioeconomic Status		.82[b]	.29	.18	21.82		
Community Integration		- .01[c]	-.13	.00	4.79		.14
Community Satisfaction		.03	.04	.04	.57		
Y_2 ∫ SD	6.10					24	
Labor Force Non-Participation		-2.90[b]	-.49	.36	65.29		
Socioeconomic Status		.92[b]	.33	.17	28.74		
Y_2 ∫ C	6.12					4	
Community Integration		- .02[b]	-.20	.00	9.17		
Community Satisfaction		.05	.07	.05	1.03		

[a]Dependent variable (willingness to move) is coded Y_1 for model of those under 63; Y_2 for those 63 and over. SD stands for sociodemographic block, C stands for community attachment block.

[b]$p < .01$

[c]$p < .05$

Roughly 11 percent of the variance was explained by this equation.

An examination of the restricted models for the younger age group reveals similar patterns. Again, labor force non-participation makes the significant contribution for the sociodemographic block, which accounts for seven percent of the variation in willingness to move. While the community attachment block has two significant contributing factors, this restricted model explains slightly less variance than the former.

Column 8 of Table 2 contains the standardized regression coefficient for each block of variables, controlling on the remaining block. This standardized multiple partial is a composite variable composed of the "linear combination of the variables that go into it which minimized the sum of squared deviations of the predicted dependent variable from the actual one." (Coleman, 1975:369). Through the use of a standardized regression coefficient for a block of variables, comparisons of the direct effects of each block of indicators on willingness to move can be made.[7]

For the younger age group there is only minor variation between the two standardized multiple partials: .25 for the sociodemographic and .21 for the community attachment. On this basis we would be hard pressed to conclude that either block of factors supersedes the other in terms of importance while they both apparently contribute roughly equivalent and unique explanatory power to the fully specified model.

The older age group (63 plus) is different. The combined or fully specified model accounts for 26 percent of the total variance in the system. Labor force non-participation has the greatest impact on willingness to move. However, socioeconomic status also exerts a significant influence on willingness to move. Here, both components of the sociodemographic block contribute to the explanation of the dependent variable.

A different situation exists for the attachment block; only community integration was significant. The failure of community satisfaction to impact upon an individual's willingness to move for the older group was not expected (cf. Shaw, 1975).

An examination of the multiple partials associated with the older group also revealed differences. The impact of the sociodemographic factors is three times that attributable to the attachment factors (.47 compared to .14).

In summary, these findings suggest that labor force non-participation, regardless of age of respondent, is the most critical factor in influencing one's long term willingness to move. While significant relationships between attachment factors (integration and satisfaction) are present, the magnitude of their impact on the dependent variable is in all cases smaller than that of labor force non-participation. Further, community satisfaction exhibits small coefficients in all cases.

DISCUSSION AND IMPLICATIONS

The findings suggest several modifications to current migration decision making models. On the basis of our model it would appear that both sets of factors have a bearing on long term willingness to move, but are only marginally related to each other. Thus, it would appear that a more complete picture emerges when both sets of factors are considered.

There is some correspondence between our data and that reported by both Speare (1974) and Bach and Smith (1977). Wolpert's notion of stress thresholds is supported by this study, as is Bach and Smith's argument for low community satisfaction influencing an individual's propensity to move.

The major difference between this study and the earlier studies is based on both methodological and interpretive considerations. Whereas the earlier studies inferred a connection between all background or sociodemographic factors and all attachment indicators, this study specified and compared these connections. Similarly, where earlier studies emphasized the statistical significance of the various components of the integrated decision making models, this study pointed to the magnitudes of these same coefficients. For example, while it is true that in the younger model (those less than 63 years old) both blocks of factors impact on willingness to move and in similar magnitudes and directions, it is also true that together they account for only 11 percent of the variance. To argue over which factor is more critical on the basis of such small explanatory power is to mask what we take to be the true meaning of this data. Apparently, for the younger sample of Pennsylvanians, one's willingness to move is not adequately explained by any of these factors.

The situation is somewhat different for the older segment of this population as partially indicated by the higher R^2. Sociodemographic status and labor force non-participation exert an influence three times as powerful as that exerted

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[7] For a fuller discussion of the multiple-partial strategy, see Coleman (1975; 1976). The weights are computed from the following two formulas (for the two block case):

1) $$R_{12} = 1/R_{3(12)}^{2} \; R_{32}R_{31} - R_{32}^{2}R_{31}^{2} + R_{3(12)}^{4} - R_{3(12)}^{2}(R_{31}^{2} + R_{32}^{2})$$

2) $$31.2 = \frac{R_{3(12)}^{2} - R_{32}^{2}}{1 - R_{12}^{2}}$$

where

$R_{3(12)}$ is the multiple correlation of blocks 1 and 2 with the dependent variable.

R_{31} is the multiple correlation of block 1 variables with the dependent variable.

R_{32} is the multiple correlation of block 2 variables with the dependent variable, and

R_{12} is the correlation of the compound of block 1 variables with the compound of block 2 variables.

by the attachment factors. The strong association of labor force non-participation and age with the dependent variable suggests that the life cycle change associated with retirement alters an individual's willingness to move towards employment opportunities. As long as the individual remains in the labor force, at all ages including retirement, he will exhibit high willingness to move regardless of his tenure and/or satisfaction with his current community.

While community attachment factors do impact upon the decision making process, they alone cannot be used to assess the long term willingness of a population to move. Because the sociodemographic factors are relevant in both the younger and older models discussed above, we would suggest their incorporation (along with the attachment factors) in future analyses. Apparently large structural factors such as changing patterns and employment needs of sustenance organizations have a strong influence on an individual's desire to move. Further, it would appear that individuals participating in the labor force up to retirement maintain an intention to move toward economic opportunities without regard to current community attachments.

The relationship between the process of an individual deciding to move and actual migration is not solely mediated by community ties, but rather appear to be influenced also by the structure of opportunities. The exception would be for dissatisfied individuals for whom local society has become a liability. We suggest that those migration decision making models based solely on attitudinal variables be expanded to include facets of the larger social demographic forces at work.

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